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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,303	07/03/2003	Olaf Skibba	1143-II-22.268	3851

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ROBERT W. BECKER & ASSOCIATES  
Suite B  
707 Highway 66 East  
Tijeras, NM 87059

EXAMINER
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SOOHOO, TONY GLEN

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/618,303

Applicant(s)

SKIBBA, OLAF

Examiner

Tony G. Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11-30 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 11-30 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings were received on 3/22/2004. These drawings are accepted by the examiner.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 recited that the a width of the 1<sup>st</sup> ribs of the extruder is increased approximately to a width of the 2<sup>nd</sup> ribs of the extruder screw.

The claim is vague and imprecise of what feature of respective ribs is to deemed the "width". The claim never positively points out where is the width to be measured in the respective ribs. Thus it is unclear in what positive element is being measured and compared to between the 1<sup>st</sup> and 2<sup>nd</sup> ribs. Additionally, the claim recited that the width "is increased", but never positively points out what the initial width value such that it may be increased to the recited value in the claim. Thus the claim appears to be incomplete

and fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamaoka 4408887.

The Yamaoka '877 reference discloses a screw sleeve 16 with flow channels 39, 39, 39, figure 4 with 1<sup>st</sup> ribs 29 with a ridge face, and a screw extruder section with 2<sup>nd</sup> ribs 32, 32, figure 3, and flow channels between the 2<sup>nd</sup> ribs and having a ridge face.

The Yamaoka '877 reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of having the geometry of the ridge faces of the sleeve corresponding to at least 1/3<sup>rd</sup> of the flow channel, and the gap formed corresponding to 0.5% of the diameter of the screw and wherein a width of the 1<sup>st</sup> ribs is increased approximately to a width of the 2<sup>nd</sup> ribs (claim 1); or at least 1mm as the gap (claim 26).

Absent unexpected result to the geometry gap, and rib widths, ridge sizes of the Yamaoka '877 device, and since such a modification would have involved a mere

change in the size of a component. ( A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).), it is deemed that it would have been obvious to one of ordinary skill in the art to modify the size of the respective rib widths, the size of ridge face, or the width of the gap to a more appropriate size or relative size, since such relative surfaces and gap sizes are an effective variable in producing and optimizing the shear effects produced between the flow of material between the two surfaces of the gap, or between the ribs or the ridge faces and that of the channels and/or channel ribs. It is also it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

### ***Response to Arguments***

7. Applicant's arguments filed 7-21-2005 have been fully considered but they are not persuasive. Applicant argues that the Yamaoka reference does not show in combination with the limitation of a width of the 1<sup>st</sup> ribs of the extruder sleeve is increased approximately to a width of the 2<sup>nd</sup> ribs of the extruder screw, see REMARKS/Arguments in paragraphs 4-7 on page 6, and the reference does not show or teach an adaptation of the ribs.

In response to applicant's argument that there is no suggestion to modify the reference, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the in the art of screw extruders the sizes of the gap, channel, and rib surface widths are known effective variables in providing a flow gap which induces shear effect working upon the plasticized material. As discussed above, a change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). It is also it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) Accordingly, with the common knowledge generally available to one of ordinary skill in the art, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the size of the respective rib widths, the size of ridge face, or the width of the gap to a more appropriate size or relative size, since such relative surfaces and gap sizes are an effective variable in producing and optimizing the shear effects produced between the flow of material between the two surfaces of the gap, or between the ribs or the ridge faces and that of the channels and/or channel ribs).

### ***Conclusion***

8. The prior art previously made of record and not relied upon is considered pertinent to applicant's disclosure. Geyer 5348388 and 5641227, Csongor 4749279, and 4447156, Yamaoka 5370456, and Wenger 5694833.


9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G. Soohoo whose telephone number is (571) 272 1147. The examiner can normally be reached on 7-5PM, Tue-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tony G Sobhoo  
Primary Examiner  
Art Unit 1723

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